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A
GUIDE TO GOOD
MEALS
FOR THE
JUNIOR HOMEMAKER



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A GUIDE TO GOOD MEALS FOR THE JUNIOR HOMEMAKER

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Have you ever tried to picture to yourself a market or a fair with all the kinds of food in the world and people of all races coming with market baskets to get their supplies for the day? There would be fruits and vegetables of many shapes and almost every color, some fresh, some dried, some canned; milk of cows, goats, camels, water buffaloes, and many other animals; eggs of many sizes, and with



shells thick or thin; all the meats we know and many more; soy beans, lentils, peanuts, and common dried beans and peas; wheat, rice, barley, corn, oats, rye, and all the other cereals; sugar, honey, molasses, candy, and other sweet foods; and butter, lard, suet, oils, and the various fats used in enriching and seasoning food. The Japanese would, of course, fill his basket with the foods he knew, and the Hindu, the European, the American, and all the rest likewise. But the interesting point is that in most cases they would all have food of the same five types, though no two would select exactly the same combination. Furthermore, the materials in these foods are the very kinds out of which the body itself is made, or which meet its special needs in some way.

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HOW FOOD SUPPLIES BODY NEEDS

Food is useful to our bodies in at least three ways:

To build new tissues and repair old ones. To furnish energy for work and play.

To regulate the machinery of the body so as to insure normal growth and health.

Our bodies are often compared to engines, and the food we eat to coal, wood, or gasoline used as fuel. This is a good comparison as far as it goes, but it does not tell the whole story. The engine does not use coal to build or repair itself, but our food must do that as well

as supply the energy or power for work.

Protein builds and repairs tissue and also supplies energy. Carbohydrates—fats, starches, and sugars—furnish energy. Iron, calcium, phosphorus, and other minerals are needed for teeth, bones, blood, and other parts of the body. Roughage, the bulky material, supplied by certain foods, helps to keep the food moving through the digestive tract. Still other substances, called vitamins, do their share in keeping up the normal growth and health. Also water is of great importance to our health. Our bodies are about two-thirds water, and to make up the constant loss through perspiration, breathing, and body wastes we use the water in our food as well as the 5 or 6 glassfuls we drink every day.

If our bodies do not get these necessary things in proper proportions, they can not develop normally. This may have a serious effect not only on the shape and appearance of our bodies but also on our work in school and elsewhere and even on our dispositions.

The common signs of good nutrition are straight legs and ankles and well-developed arches; straight back with shoulder blades flat; full, rounded chest; strong teeth with thick enamel that protects against decay; clean tongue and sweet breath; firm flesh of healthy color; sparkling eyes with clear whites; glossy hair; a keen appetite for simple, wholesome food at every meal; and an alert, happy, energetic attitude toward life in general. Poor nutrition shows itself in quite the opposite ways in such signs as bowlegs and knock-knees; "winged" shoulder blades; narrow chest; decayed uneven teeth and bad breath; dark-circled eyes; rough, brittle hair; pale cheeks; a freakish appetite, or none at all; and a constantly tired or high-strung feeling that makes everything harder. Proper food selection, therefore, is something that everybody needs to understand.

THE FIVE FOOD GROUPS

Protein, carbohydrates, fats, minerals, and other substances that nourish the body are sometimes called "nutrients." Some of these nutrients, or nourishing substances, are found in one food, some in another, and in all sorts of different combinations. Though no two foods are precisely alike in the substances that they furnish the body, some are so similar that the common foods can be divided into five groups. This is what was meant when it was said that the people from different countries marketing at a great world food fair would probably have in their baskets five types of foods. In other words, they would choose foods that could be divided in five groups, each one helping to make the meals well balanced and appetizing.



GROUP 1. VEGETABLES AND FRUITS

Vegetables and fruits are rich in mineral matter, which the body must have to build and repair bones, teeth, and other tissues and to keep it in good running order. They also contain vitamins necessary for health and normal growth and development of the body,

while the bulky material helps to prevent constipation.

In the world food fair the United States would probably have more kinds of fruits and vegetables than any other one country, because we have great range of climate and soil and also because many of the choicest fruits and vegetables from all over the world have been brought here. At least 50 vegetables and almost as many fruits are now grown in this country. Each of these has a different flavor or texture or appearance, and few, if any, are exactly alike in food value. Even among the leafy vegetables, which are considered especially valuable for vitamins and minerals, you have a choice of spinach, cabbage, lettuce, beet tops, kale, chard, dandelion greens, and many more. These green-leaf vegetables and tomatoes, carrots, lemons, grapefruit, and oranges, because of the vitamins they contain, are often especially recommended for growing young people, though they are needed by everybody.

GROUP II. EFFICIENT-PROTEIN FOODS

Milk, eggs, cheese, meats, poultry, fish, and certain legumes, such as peanuts and soy beans, contain protein of a kind called "efficient," because the body can use it to especially good advantage in building new tissues and repairing old ones. These foods, of course, vary in the proportion of protein they contain. Lean meat, egg white, and cottage cheese come the nearest to being all protein, but even they contain mineral matter, water, and other substances besides. Vitamins are found in some of these efficient-protein foods and are particularly abundant in whole milk, egg yolk, and the liver and other edible organs of meat animals.

The Englishman choosing from these foods would probably select a joint of meat, if only to live up to his reputation as "beef eater"; the Chinese would eagerly take soy beans; no European would go away without some one of the many kinds of cheese; and everyone would try to take some kind of milk, especially for the young people in his family. For of all the protein foods whole milk is most highly recommended for boys and girls. Here in America we have this slogan: "At least a pint of milk a day for every boy and girl."





GROUP III. CEREAL FOODS

The cereal foods include not only the grains themselves as we see them in rice and pearl barley but also the prepared forms, such as breakfast foods, hominy, flour, and meal and even bread, crackers, and most other "baked goods." A biscuit, a slice of toast, or a dish of macaroni may not seem like a cereal food until you remember the chief material used in making it. All cereals contain some protein, though of not so efficient a kind as that in the foods of Group II. Starch, which belongs to the class of substances called carbohydrates, is the most abundant food material in cereals, and the body uses it as fuel to keep it warm and to provide it with energy. Some of the cereal grains also contain fat, as, for example, corn, from which oil is extracted and used in many ways. Whole-grain cereal foods—that is, those with the bran or outer layers of the grain and the germ—also supply roughage, minerals, and vitamins. In fact, many food specialists declare that these whole-grain cereals should have a regular place in the day's meals, especially of young people, for they need a particularly abundant supply of minerals and vitamins.

All the people at the food fair would put generous quantities of some kind of cereal into their baskets. Moreover, each one would get practically the same amount of energy from a pound of whatever cereal he chose. Rice to the Japanese, oatmeal to the Scotchman, and barley cake to the Scandinavian are what bread is to us. The world over, cereals are "the staff of life," because they are cheap as compared with other foods, easy to grow, ship, and store, and have

a mild flavor that combines well with other foods.

GROUP IV. SWEETS

Sugar itself and honey, molasses, sirups, jellies, rich preserves, candy, and other sweet foods containing a great deal of some form of sugar also supply carbohydrates which the body can quickly convert into energy. They are valuable, too, for their flavor, but because they are satisfying and because nearly everybody likes them too well sweet foods need to be carefully used.

The United States indulges its sweet tooth more than any other nation, and often at the wrong times. In consequence the keen edge is taken off our appetites, so that we often neglect more important





foods at our regular meals. Boys and girls especially need to guard against eating too much candy and other sweets, because they, even more than grown persons, need certain other foods to help them develop strong bodies and alert minds. Some dried fruits, such as figs, raisins, prunes, and dates, contain so much sugar that they might almost be included in this group. Certainly they can often be used instead of other sweets with benefit to the body, because such fruits are rich sources of valuable minerals.

GROUP V. FATS AND FAT FOODS

The fats, which include butter, cream, lard, suet, table oils, and such fat foods as salt pork, bacon, chocolate, and nuts, are used by the body as fuel. Fats are the most concentrated of all foods. In fact, you would get enough energy from an inch cube of butter to enable you to climb to the top of the Washington Monument—550 feet. Vitamins are found in some fats, especially butter and cream, and minerals in chocolate and a few others. Fats also give a pleasant, rich quality to foods if carefully used. Hence, we recommend seasoning vegetables with just enough butter or cream to improve but not destroy their flavor and texture, and we caution against serving foods "swimming in grease."

You would probably laugh and turn up your nose as you saw the Eskimo choosing whale blubber at the world food fair, and he would be equally puzzled by the rush of the Italian for olive oil and by your choice of butter and cream. Food specialists, however, would agree with you, for they recommend reasonable quantities of milk fat in the form of either butter or cream for growing boys and

girls.

WHAT ARE CALORIES?

One of the best ways to estimate the quantity of the food needed by a person or a family is in terms of calories. There is nothing mysterious about a calorie; it is simply the unit of measure of heat or fuel value, just as the quart and the pound are units of measure of quantity and weight. What may seem remarkable, though, the calorie can be used to measure not only the fuel or energy value of foods, but also the energy spent by the body.

The number of calories in a pound of most of the common foods is published in Government bulletins and in textbooks on food and diet, as well as the number of calories that the day's meals should supply for boys and girls of various ages and for the older members of the family doing different kinds of work. The grown people in the family and the boys and girls over 12 will probably need on the average at least 2,700 calories per day from food as served on the

table. The men and boys will probably need more and the women and girls less. If we measure the food as it comes from the farm or market, the day's supply should furnish about 3,000 calories, because there is always some waste in preparing and serving food.

When discussing the fuel-value of a whole meal or a week's supply of food, the term "100-calorie portion" is often used for convenience, just as we say a dollar instead of 100 cents. Also, the ordinary serving of many foods is about equivalent to a 100-calorie portion. For example, a large apple or a medium-sized orange, a medium-sized potato, five-eighths of a cup of milk, 2 scant tablespoons of sugar, and 1 scant tablespoon of butter are 100-calorie portions.

Nobody needs to memorize a calorie table, but you can sometimes plan meals more easily and economically if you remember that fats yield more calories per pound than any other group of foods, that sugars and starches have about equal fuel value, and that watery foods supply far less calories pound for pound than do dry foods. A pound of fresh grapes, for instance, yields about 450 calories, but a pound of raisins yields about 1,600 calories. "Counting the calories" is only one of the important points in wise food selection, and fresh juicy fruits and vegetables and other watery foods are important for other reasons, even if they are low in calories.

THE DAY'S MEALS

Planning meals, then, is just combining these five groups of foods in the right proportions and in wholesome, attractive ways. Every breakfast, dinner, or supper, however, does not need to include every group, though as a matter of fact even the simplest generally do. Think, for instance, of the kind of breakfast with which you like to "start the day right": Fruit, whole-grain cereal with milk or cream or perhaps an egg or a little bacon, toast or some other kind of bread with butter, and plenty of milk to drink. Every group is represented, even the sweets, for the fruit is usually either cooked or eaten with a little sugar.

Also you need all five of the food groups to keep your meals varied and appetizing. Though you may have declared some time that you could live on nothing but ice cream and cake, if you tried it you would soon crave other foods. Our appetites are a fickle guide and not to be trusted too far. Also, they often tempt us to use foods that are costly of time or money or are out of season, and so to neglect fresh home products or simple dishes that would better

supply our body needs.

In order to be economical and to avoid waste, you can often substitute the various foods in a group for each other. It is not safe, however, to substitute one group for another for any length of time. It is like playing football, or baseball, or any other game in which there are teams of players who have certain parts of the teamwork assigned to them. A pitcher does not catch, nor does a quarterback play fullback. So you would spoil the teamwork that the five groups of foods are doing for your body if you should try to make cereals take the place of fruits and vegetables in your meals, or neglect any one group for another.

If you were planning a ration for your calf, the kinds and proportions of various feeds would be one of the most important points. Dairymen have found out that a 200-pound calf of a certain age needs a definite quantity of milk, grain, and roughage in order that it may develop most vigorously. Therefore, what proportions of the five groups of foods it is best to use in the daily or weekly meals, is the next question in food selection. This is where calories are useful. For one of the ways to state good proportions is in terms of fuel, or energy, furnished by the different food groups, and, as has been explained, the calorie is the unit of measure for this. The following have been suggested as good proportions for persons doing an average amount of muscular work. These proportions, though stated in calories, will also provide enough minerals, vitamins, and roughage, if you choose wisely among the foods of the different groups.



Vegetables and fruits in variety (Group I) should furnish one-fifth of the fuel your body needs; efficient-protein foods (Group II), one-fourth; cereal foods (Group III), one-fourth; sweets (Group IV), one-tenth; and fats and fat foods (Group V), one-fifth. If you were playing on the football team regularly or doing very heavy farm or other work that taxed your muscles, you might need more of the foods high in calories, such as cereals, sweets, and fatty foods.

From tables giving the calories in a pound, or dozen, or quart, of the common foods, you can also estimate about what quantities of each group should be used. This has been done for an "average" family in one of the United States Department of Agriculture bulletins.¹

¹ Farmers' Bulletin 1313, Good Proportions in the Diet.

A boy or girl 12 years old or over, it is said, would probably get all the food he needed for a day if he had some such combination as this:

Breakfast: Fruit, raw or cooked; cereal with cream or milk; perhaps an egg, or a serving of bacon, fish, or some other food from this group; toast,

muffins, or some other bread, with butter; milk to drink.

Dinner: Meat, poultry, fish, or one of the hearty cheese and egg dishes; two vegetables, one of which is a leafy vegetable if possible, either greens, such as spinach, cabbage, or dandelion leaves, or a simple salad, which first meant "a green vegetable eaten raw with salt"; bread and butter; milk to drink; a simple pudding, or fruit and cookies or cake, or perhaps two or three pieces of candy.

Supper or lunch: Milk-vegetable soup, or creamed eggs, or a creamed vege-

table; bread and butter; milk to drink; fruit.

One way to get some idea whether you are getting enough food and of the right sort is to keep track of your weight and height. This is, however, only a general indication, for you must remember that food is only one of the things that determine how tall, or how fat, or how thin you shall be. The tables (10 and 11) compiled from the records for many boys and girls show what is considered normal weight and height at various ages up to 18 and 19 years.

To have attractive, pleasing meals, you must also plan how different textures and flavors and sometimes even colors of foods combine. It is not only epicures who think about such things. We want to give our bodies the food they need to keep them well and strong, and we are more likely to eat the right foods if they please eve and nose and tongue as well. Have you ever thought why you liked a crisp, juicy apple after your lunch of sandwiches and other soft foods, or why crackers seemed even better than bread with cheese? In your meals plan to have foods of different texture; that is, some hard, some soft, some crisp, some juicy.

Everybody, of course, has favorite combinations of foods so far as flavor is concerned, and is constantly discovering new ones. In general, foods of delicate but distinctive flavor, like that of fresh green peas or young chicken, should be so used that it can be appreciated. Pronounced flavors, such as those of cabbage and ham, can be toned down with foods of mild flavor like potatoes, or they can be brought

out by combining them.

Without working out any elaborate or artificial color schemes make the most of the attractive color of foods. There are all sorts of simple ways of touching up dishes with bright-colored foods and of making attractive combinations. A slice of red tomato on a cottage cheese salad adds something besides different texture and flavor, and every New Englander, unless color blind, is aware of the attractive appearance of his Fourth-of-July fresh salmon and green peas.

In planning meals always make the best possible use of fresh fruits or vegetables and other foods from your own farm or garden or produced locally. When strawberries or peaches are in season, enjoy them to the full and leave canned pineapple to fall back on when fresh fruits are scarce. Or, if you have plenty of salad vegetables in your garden, it certainly does not make for economy and perhaps not for a well-balanced meal to use canned salmon for that purpose. Try also to have as few left-overs as possible, unless you know beforehand how you are going to use them and have good means of keeping them. Using up left-overs is sometimes false economy of health, of time, and even of materials if you must use undue quantities of fresh supplies in order to make the left-overs palatable. However, you can save time and fuel, too, if, for instance, in preparing spinach or some other vegetable you allow enough for dinner and for combining with milk in soup for lunch or supper the next day.

FOOD FACTS TO REMEMBER

Whether in planning meals for a family or in choosing foods at a cafeteria or a lunch room, these points are worth remembering:

Our bodies need proper food to furnish them with the energy needed for work and play and to build, repair, and keep them healthy and in good running order.

Each of the five groups, into which all foods can be divided, sup-

plies the body with something it needs.

Plenty of vegetables and fruits are needed for minerals, vitamins, and cellulose or bulk. In fact, we can hardly be too generous with this group in planning our meals. It also adds the greatest variety of textures and flavors and colors which help to make food appetizing.

For protein to supply the material to build the tissues of which our bodies are made, we need meat, poultry, fish, milk, eggs, cheese, or one of the legumes that come in this group. Some of these foods

also supply minerals and vitamins.

From cereals and cereal foods, such as bread and other baked goods, we get energy more economically than from any other group. This is the reason that cereal of some kind is called the mainstay of diet for people in every part of the world. Whole-grained cereal foods, such as whole-wheat products and unpolished or "brown" rice, contain vitamins and minerals.

Sugar, sirups, honey, and other sweets also supply fuel to give us energy to keep our bodies warm. However, they have pleasant flavor that may sometimes encourage us to eat more than is good for us.

Fats and fatty foods are the most concentrated fuel foods of all. A little of them therefore goes a long way; but, if skillfully used, they give a rich flavor and texture to our meals. Among the fat foods, butter and cream are also rich sources of vitamins.

These five groups of food combined in the right proportions make what are sometimes called "balanced" meals. Such meals are appetizing and pleasant to eat, and they help to keep us well and strong.

Weight-Height-Age table for girls 1

-			1			-				,				
Height	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years
Inches 3839	Lbs. 33 34	Lbs. 33 34	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
40 41 42 43	36 37 39 41	36 37 39 41	36 37 39 41	41										
454647	42 45 47 49	42 45 47 50	42 45 47 50	42 45 48 50	45 48 50	50								
48 49 50 51		52 54 56	52 54 56 59	52 55 57 60	52 55 58 61	53 56 59 61	53 56 61 63	62 65						
52 53 54			63 66	64 67 69	64 67 70	64 68 70	65 68 71	67 69 71	71 73					
55				72	74 76 80	74 78 82 84 87	74 78 82 86 90	75 79 82 86 90	77 81 84 88 92	78 83 88 93 96	92 96 100	101 103	104	
60						91	95 99 104	95 100 105 110 114	97 101 106 110 115	101 105 109 112 117	105 108 113 116 119	108 112 115 117 120	109 113 117 119 122	111 116 118 120 123
65 66 67 68 69								118	120 124 128 131	121 124 130 133 135	122 125 131 135 137	123 128 133 136 138	125 129 133 138 140	126 130 135 138 142
70 71										136 138	138 140	140 142	142 144	142 144 145

¹ Published by the American Child Health Association, August, 1923.

Weight-Height-Age table for boys 1

Height	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years
Inches 3839	Lbs. 34 35	Lbs. 34 35	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.		Lbs.	Lbs.	Lbs.
40 41 42 43 44	36 38 39 41 44	36 38 39 41 44	38 39 41 44	39 41 44											
45 46 47 48 49	47 49	46 48 50 52 55	46 48 50 53 55	46 48 50 53 55	46 48 50 53 55	50 53 55	55								
50 51 52 53 54			58 61 63 66	58 61 64 67 70	58 61 64 67 70	58 61 64 67 70	58 61 64 67 70	58 61 64 68 71	64 68 71						
55 56 57 58 59				72 75	72 76 79 83	73 77 80 84 87	73 77 81 84 88	74 77 81 85 89	74 78 82 85 89	74 78 83 86 90	80 83 87 90				
60 61 62 63 64						91	92 95 100 105	92 96 101 106 109	93 97 102 107 111	94 99 103 108 113	95 100 104 110 115	96 103 107 113 117	106 111 118 121	116 123 126	127 130
65 66 67 68 69								114	117 119 124	118 122 128 134 137	120 125 130 134 139	122 128 134 137 143	127 132 136 141 146	131 136 139 143 149	134 139 142 147 152
70 71 72 73 74										143 148	144 150 153 157 160	145 151 155 160 164	148 152 156 162 168	151 154 158 164 170	155 159 163 167 171

¹ Published by the American Child Health Association, August, 1923.

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